

Title (en)
DEVICE AND METHOD FOR PLASMA TREATMENT OF CONTAINERS

Title (de)
VORRICHTUNG UND VERFAHREN ZUR PLASMABEHANDLUNG VON BEHÄLTERN

Title (fr)
DISPOSITIF ET PROCEDE DE TRAITEMENT AU PLASMA DE CONTENEURS

Publication
EP 4059039 B1 20240807 (DE)

Application
EP 20803820 A 20201109

Priority
• DE 102019130303 A 20191111
• EP 2020081486 W 20201109

Abstract (en)
[origin: WO2021094252A1] The invention relates to a device for the plasma treatment of containers (5), comprising a process gas generator (100) for generating a process gas mixture and comprising at least one plasma station (3), which comprises at least one plasma chamber (17) having a treatment position (40), in which plasma chamber at least one container (5) having a container interior (5.1) can be inserted and positioned in the treatment position (40), each plasma chamber (17) being at least partially evacuable in order to suck the process gas provided by the process gas generator (100) through the container (5), the interior of the container thus being provided with an inner coating by way of plasma treatment, and a throttle (81.2, 82.2, 83) is provided in at least one process gas duct (81, 82, 83) on the side of the associated process gas valve (81.1, 82.1, 83.1) facing away from the plasma chamber (17) and at a buffer distance to the process gas valve (81.1, 82.1, 83.1) that can be separately defined. The invention also relates to method for the plasma treatment of containers (5) in a plasma treatment device, wherein the process gas buffer is produced by a process gas valve (81.1, 82.1, 83.1) associated with the respective process gas and the dynamic pressure of this process gas is increased upstream of the process gas valve (81.1, 82.1, 83.1) associated therewith.

IPC 8 full level
H01J 37/32 (2006.01); **C23C 16/04** (2006.01); **C23C 16/455** (2006.01); **C23C 16/56** (2006.01)

CPC (source: EP)
C23C 16/045 (2013.01); **C23C 16/45561** (2013.01); **C23C 16/56** (2013.01); **H01J 37/32394** (2013.01); **H01J 37/3244** (2013.01); **H01J 37/32449** (2013.01)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
DE 102019130303 A1 20210512; EP 4059039 A1 20220921; EP 4059039 B1 20240807; WO 2021094252 A1 20210520

DOCDB simple family (application)
DE 102019130303 A 20191111; EP 2020081486 W 20201109; EP 20803820 A 20201109